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Examining the representation of sporting women in Taiwanese trendy drama-Hot Shot

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This study examined representation of sporting women and the gendered discourse within dialogue in trendy drama. The study object was chosen from Taiwanese trendy drama—Hot Shot, which broadcasted during 2008 and casted by popular idols. The storyline was based upon intercollegiate basketball competition, friendship and romance. Rarely, both in Taiwanese drama and real setting, the coach of male basketball team and a masked street player were casted by female. Thus, the purposes of this study were: 1) to analyse the manners of Hot Shot representing female characters; 2) to disclose the gendered discourse within dialogue; 3) to indicate the scenes of female characters transgressed the gender norm in sport field. Content analysis was conducted to uncover the preference of clothing and shooting angle toward female characters; moreover, discourse analysis was deployed to explore how female characters stride over the barriers of gender stereotype and gender role in sport field. 8 episodes were selected as sample from Hot Shot, which according to TV program rating, each episode broadcasting for 90 minutes. The findings revealed three themes:(1) the Hot Shot tended to representing sexy and slim female images lure audiences; (2) the gender norm and gender order were pervaded in Hot Shot;(3) from the perspective of postmodern feminism, we saw how female utilised their own bodies and representing their unique experience and embodying the values of sporting women. To conclude, the strategies of Hot Shot in representing sporting female as emphasize sex appealing and gender stereotype was infused into dialogues; yet, it attempted to depict new gender order by offering unprecedented female character model in Hot Shot. It was suggested that further study should draw more attention on audience for enhancing the understanding about the relationship in text, production and audience, and compare the strategies of representing sporting female in different TV programs.

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Heart-capturing (Kandoh) scene in sports

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In this study aims to (1) develop a scale for measuring specific aspects of scenes that evoke sports spectators' *Kandoh*, (2) investigate gender differences with respect to such scenes, and (3) examine the impact of such scenes on spectators' satisfaction and intentions to attend future games. The word *Kandoh* refers to a positive emotional state arising from emotive experiences.

The scale was developed by (1) collecting items of measurement from a field survey at a stadium, arena, and university (n = 708), (2) reducing the set of items in order to obtain a reasonable measurement scale for field study, with the assistance of a PhD student in sports management and of an expert in sports management to check the meaning of each scale, and (3) ascertaining the validity and reliability of the scale through confirmatory factor analysis; in addition, the average variance extracted (AVE) and Cronbach's α were calculated in a field survey (n = 371). To investigate the gender difference regarding *Kandoh* scenes (n=662) and examine the impact of such scenes on spectators' satisfaction and intentions to attend future games (n=369), a field survey was conducted.

As a result, an initial scale measuring eight aspects of *Kandoh* scenes (sympathy/togetherness, spectating in a stadium, dramatic scenes, outstanding play, strenuous figures, humanity, success from overcoming barriers, and additional elements) was developed. After confirming that the scale was a good fit (χ^2/df = 2.579, GFI = .869, AGFI = .835, CFI = .923, RMSEA = .065) and that its convergent validity and reliability were good (Cronbach's α = .75 - .89, AVE =.85 - .95), we performed a t-test to confirm the existence of a gender gap with respect to *Kandoh* scenes (spectating in a stadium, outstanding play, success from overcoming barriers, strenuous figure, and humanity) and some *Kandoh* scenes influenced spectators' satisfaction and future intention. The implications of the results are as follows. For example, as "sympathy/togetherness" influenced satisfaction ($p < .05$), as indicated by Kuenzel and Yassim (2007), it is important to ensure that a spectator shares euphoric moments with friend or family member in a stadium.

In this study, these results need to be analyzed more specifically and the meaning of *Kandoh* in the context of other countries needs to be examined. However, these findings are valuable while considering the emotional aspects of spectators and may aid future sports marketing.

Transformational leadership, psychological empowerment, and organizational citizenship behavior in team sport organizations: Mediating effect of psychological empowerment

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Many researchers suggested that transformational leadership is positively associated with work and followers' attitudes and behaviors at both an individual and organizational level as well as organizational outcomes in various industries including sport fields (Bass, 1985; Davis, 2002; Koh, Steers, & Terborg, 1995; Lim, & Cromartie, 2001; Lowe, Kroeck, & Sivasubramaniam, 1996). Transformational leaders help followers develop fundamental value, belief, and their attitudes to achieve a high level of performances. In particular, this type of leadership has a significant impact on psychological empowerment and organizational citizenship behavior to actively enhance organizational effectiveness (Spreitzer, 1995; Thomas & Velthouse, 1990; Podsakoff, MacKenzie, & Bommer, 1996). Therefore, the purpose of this study is to empirically examine the relationship among transformational leadership, psychological empowerment, and organizational citizenship behavior in professional handball teams.

Data were collected from total population of handball players with a total of five teams in Korean men's professional handball league during 2009 season. The respondents age categorization was 20s (78.2%), 30s (20.5%), and 40s (1.4%) respectively. The highest group of athlete careers was more than 10 years to less than 20 years (86.1%), more than 20 years (12.5%), and less than 10 years (1.4%) respectively. A survey method was implemented including 20 items for transformational leadership (Bass & Avolio, 1995), 12 items for psychological empowerment (Thomas & Velthouse, 1990; Spreitzer, 1995), and 22 items for organizational citizenship behavior (Organ, 1988; Podsakoff et al., 1990) that those items were already verified in the studies.

The results indicated that team leader's transformational leadership was a positive effect on athletes' psychological empowerment (R-square change = .213, $F(1,71) = 19.196$, $p < .01$) and organizational citizenship behavior(R-square change = .102, $F(1,71) = 8.099$, $p < .01$). Also, the psychological empowerment positively affected on the OCB (R-square change = .354, $F(1,71) = 38.981$, $p < .01$). In sum, team leader's transformational leadership has a positive impact and leads to effective athletes' psychological empowerment and the OCB as an extra-role behavior in the context of sports. Based on the results, implications and limitations are discussed.

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Female's participating in China's sport

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Female sports is an important social problem, it is not only related to women and sport, but also related to women and society, women's status, female values, etc. Under the help of the whole nation system , Chinese female sports has achieved great success. In the process of Chinese women participating in sports, it accumulates some experience but it also has some problems. In order to explain these experience and problems, this study uses of gender analysis method and finds that the character of the female players and managers in China's sport influenced by the traditional gender concept. While adhering to the point of social gender，we should also understand other social factors . As one comprehensive system, the female participation in sports has its inherent law which is the specific result of various factors such as history，etc. , and it is closely related to the cultural and social background where people live, therefore, it is necessary for us to analyze this issue from the view of sociology. This paper also conducts the study from the view of other sociological factors such as politics, economy, family, subject consciousness, social capital and social media, and finds that these factors promote the female to participate in sports while hamper their participation to some extent. To promote women deeper, more comprehensive involved in sports in China, this study finally puts forward some proposal for promoting women in China to participate in sport. They are: clearing the main body in female sports, construction of new social-sexual culture, reforming the system, promotion of family function , cultivation of female consciousness , construction of female social capital.

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Force production in lengthened skeletal muscle

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Our understanding of how muscles contract and produce force is based on the sliding filament cross-bridge theory. Two independently published articles in the journal *Nature*, in 1954 by Andrew Huxley and by Hugh Huxley observed constant A-band width with variable I-band width during skeletal muscle contraction and provided evidence for inextensible filaments and the sliding of these thick and thin filaments past each other during contraction. As well, Hugh Huxley suggested that the development of actin-myosin linkages might be the driving force observed in muscle contraction. The cross-bridge theory has become widely and near-universally accepted today and according to this theory, active force can only be produced when there is overlap between the thick filament (primarily myosin) and the thin filament (primarily actin) and when cross-bridges occur between them. If sarcomere length is such that thick and thin filament overlap does not occur then any measured forces are thought to be the result of passive structural elements, regardless of the activation state of the muscle and are assumed to vary due solely to the length of the muscle. We tested skeletal muscle myofibrils over a range of sarcomere lengths and activation conditions. For activated muscle at a sarcomere length where thick and then filament overlap occurred, we observed greater force in active conditions than for inactive (passive) conditions, as expected. However, when activated myofibrils were lengthened to sarcomere lengths great enough to preclude thick-thin filament overlap, the force observed remained greater than that observed for passively lengthened myofibrils at the same sarcomere length; this observation was not expected.

Further, we show that this dramatic increase in force beyond thick-thin filament overlap is dependent on the presence of the giant protein titin but cannot be explained solely on the presence of calcium. We conclude from these observations that titin is a strong regulator of muscle force, and propose that this regulation is based on cross-bridge force-dependent titin-actin interactions. These results suggest a role for titin in muscle behaviour that are beyond the passive role typically assigned to it and may offer and explanation of history dependent behaviour in muscle, specifically force-enhancement following stretch in active muscle. As well, the high “active” forces we observe at extreme sarcomere length which may involve titin-actin interactions, could offer a protective mechanism in over-stretched activated skeletal muscle.

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Adolescent's ankle joint as a lever system: it provides the triceps surae with speed advantage over adult's

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As body grows, the bones undergo remodeling process to increase their lengths and widths. If children are proportionally scaled-down-adults, a human joint architecture may also proportionally scaled-down-adults. A human diarthrodial joint has a structure as a lever system. In a human ankle joint as a second-class lever, the lever arm of the triceps surae muscle force governs the relationship between the ankle joint motion and the function of the triceps surae muscle. The purpose of this study, therefore, was to compare the lever arm of the triceps surae muscle force and the lower limb length between adolescent boys and adults. Ten adolescent boys and 13 adults volunteered to participate. A series of coronal ankle images were obtained at ankle joint angles of -10º (dorsiflexed position), 0º (anatomical position), +10º (plantarflexed position). From -10º to +10º of ankle joint rotation, the ankle joint axis was calculated from the orientation change of the talus to the tibia. The lever arm of the triceps surae muscle force at 0º of ankle joint angle was calculated as the shortest distance from the calculated ankle joint axis to the line of action of the triceps surae muscle force at 0º of ankle joint angle projected to the orthogonal plane of the ankle joint axis. Adolescent boys have a significant smaller lever arm of the triceps surae muscle force (3.1 cm) by 23% than adults (4.0 cm). Because the inter-group difference of the lower limb length that may represents the triceps surae muscle length was 2%, it is impossible to explain the inter-group difference of the lever arm of the triceps surae muscle force only by the difference of the lower limb length. Thus the adolescent's lever arm of the triceps surae muscle force has a relatively small length compared with the triceps surae muscle length. Adolescent boys have a disadvantage for the exertion of the plantar-flexion torque by a given force of the triceps surae, while they have an advantage for the rotation angle of the ankle joint by a given shortening of the triceps surae. The triceps surae muscle of adolescent boy, therefore, can shorten faster than that of adults at a given angle rotation of the ankle joint. It was concluded that the adolescent's ankle joint provides the triceps surae with speed advantage over adult's.

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Neurophysiological correlates in peak performance

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Although a number of approaches exist to study the effects of exercise on brain cortical activity, the accessibility of brain cortical function during exercise is limited. As such, it is not clear to what extent changes in exercise intensity, especially high intensities in peak performance, influence brain cortical activity. Furthermore, due to the difficulty in using brain-imaging methods during complex whole-body movements like cycling, it is unclear to what extent the activity in specific brain areas is altered with incremental exercise intensity over time. Low distribution brain electromagnetic tomography (LORETA) allows for localized brain activity to be determined with conventional electroencephalography (EEG). Using LORETA in combination with a newly developed active EEG system this study aimed to localize electro cortical changes during an incremental cycle test up to maximal effort.

26 subjects aged 20 to 32 years performed a maximal incremental cycle test starting at 50W and increasing by 50W every five minutes until subjective exhaustion. EEG activity was recorded before and after exercise as well as during the 4th minute of each exercise stage while the subjects' eyes remained closed. Until the ultimate stage the analysis of EEG activity was possible. Spatial changes in current density were localized by LORETA to three regions of interest; the primary motor cortex (M1), primary sensory cortex (S1) and prefrontal cortex (PFC), and were expressed relative to current density within the local lobe.

It was demonstrated that the relative current density of the M1 was intensified with increasing exercise intensity, whereas activity of the S1 and that of the PFC were not altered with exercise.

The results indicate that the combined active EEG/LORETA method allows for the recording of brain cortical activity during complex movements and incremental exercise. Furthermore, the M1 seems to be responsible for a higher force output with incremental exercise intensity during a whole-body movement, like cycling, whereas the S1 and the PFC seem not to be directly involved in this regulation. To confirm that this holds true for other complex movements and subjects, for example expert or preferred cyclists, further studies are planned.

LN of current density of the primary motor (M1) and the prefrontal cortex (PFC) relative to the local frontal lobe and of the primary somatosensory cortex (S1) relative to the local parietal lobe prior (pre), after (post) and during the 4th minute of the last four stages (4th last, 3rd last, 2nd last and last) of an incremental bike exercise test until subjective exhaustion.